only by offering necessary technical advice and help but also through grant of loans, wherever necessary.

458. The Bull *cum* Milk Scheme, at Hessarghatta sanctioned at a total cost of Rs. 3,00,000 in June 1948 was implemented in August 1949 with the available buffaloes and cows from Sulekere Calf Nursery and Hebbal Dairy Farm, supplemented to some extent by the animals obtained from the Indian Dairy Research Institute, Bangalore and the Government Cattle Farm, Junagadh in Sowrashtra.

459. The scheme for the distribution of Mineral Supplement for the improvement of Malnad cattle was implemented in the three Malnad districts of Shimoga, Hassan and Chikmagalur. The mineral feed was distributed at fifty per cent concessional rates among the *bona fide* cattle owners at the several Taluk Headquarters and rural veterinary dispensaries of the three Districts. The two Artificial Insemination Centres, one at the City Veterinary Hospital, Bangalore and the other at the Veterinary Hospital, Mysore, which were opened two years ago were doing good work.

460. The question of starting a Composite Livestock Breeding and Research Farm at Hessarghatta was being considered.

461. In order to secure the necessary technical personnel to meet the additional requirements of the Veterinary Department for implementing the post-war schemes, candidates were selected and deputed for training both in India and abroad. In India, candidates were deputed for training in the Veterinary Colleges of Madras, Bombay, Mathura, Jubbalpore, Calcutta and Patna. The Department also understook the training of candidates in (a) Stockmen's Training School, Hebbal, (b) Compounders' Training Centres at Mandya, Tumkur, Hassan and Shimoga and (c) Bee-keeping training in Bangalore.

(v) The Serum Institute.

462. The Mysore Serum Institute undertook, as usual, large scale production of several sera and vaccines required for combating out-breaks of contagious diseases among live-stock. The Research Section which is attached to this Institute continued the investigation of various problems connected with diseases of livestock, besides

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undertaking the laboratory examination of all pathological materials received from the different Institutions in the State. Preparation of anti-rabic vaccine for animals and urine harmone was continued to be undertaken in the Research Section. Special attention was paid during the year to the investigation of a peculiar gastro-enterities of obscure origin among cattle, especially in the heavy rainfall area. The Institute also undertook the preparation of vaccine against Ranikhet disease among poultry. Vaccination centres equipped with refrigerators were established at the District Headquarters of the Bangalore, Mysore, Mandya, Tumkur, Chikmagalur and Shimoga where the Ranikhet vaccine is being stored and used by the District staff. Similar vaccine depots are being opened in other District Headquarters also as soon as electrical connections are given to the respective veterinary hospitals. Two lakhs thirty-nine thousand (4,46,500) doses of this vaccine were prepared.

463. The work of the Institute consisted of the manufacture on a commercial scale, of 14 different sera and vaccine generally employed for the control of epizootics among livestock. The year opened with a balance of 2,73,710 (2,46,110) units of doses of biologicals and a total quantity of 6,29,916 (10,30,117) doses were prepared during the year. Out of the total quantity of 9,03,626 (12,76,227) doses available, 5,54,386 (8,36,747) doses were supplied within the State and 1,30,117 (1,59,630) doses were sold outside the State leaving a closing balance of 2,11,260 (2,73,710) doses at the end of the year. A quantity of 26,015 (27,871) c.c. of anti-rabic vaccine for animals was prepared during the year. In addition to the main items, the Institute also provided necessary laboratory accommodation and other working facilities to the several officers in charge of various special schemes.

464. The total expenditure of the Institute for the year amounted to Rs. 1,22,115 and the revenue realised was Rs. 1,36,139 yielding a net profit of Rs. 43,155.

Government Grass, Stud and Dairy Farm, Hessarghatta.

465. The activities of this Farm are dealt with under four sections, *viz.*, (1) The Grass Farm, (2) the Stud Farm, (3) the Dry Cattle Farm and (4) the Dairy Farm.